

11-55001-65

BWT(m)/BWP(t)/BWP(t)

IJP(s)

JD/JG

UR/0075/65/020/005/0554/0560

ACCESSION NR:

AP5013498

349.70

21

20

20

AUTHOR: Ovchar, L. A., Vitkun, R. A., Poluektov, N. S.TITLE: Flame photometric determination of gadolinium and yttrium using high dispersion equipmentSOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 5, 1965, 554-560TOPIC TAGS: gadolinium, yttrium, flame photometry, rare earth

ABSTRACT: The purpose of this work was to show the applicability of flame photometry to the determination of gadolinium and yttrium using a spectrophotometer assembled from a three prism 15-P-51 spectrograph and an FEP-1 photoelectric attachment. Analytically a 597.2  $\mu\text{m}$  band was used for the determination of yttrium and a 460-466.5  $\mu\text{m}$  system of three bands for the determination of gadolinium. The sensitivity of determination was 1  $\mu\text{g}/\text{ml}$   $\text{Y}_2\text{O}_3$  and 15-20  $\mu\text{g}/\text{ml}$   $\text{Gd}_2\text{O}_3$ . The sensitivity of the determination of gadolinium and yttrium in mixtures of rare earth oxides is 0.25% and 0.05-0.1% respectively. Cerium intensifies Gd and Y emission. The investigation of this effect reveals that the action results when Ce is present in

Card 1/2

L 55031-65	ACCESSION NR: AP5013498	the same solution. It facilitates the evaporation of the element from the aerosol particles into the flame. This effect is observed in the presence and in the absence of ammonium chloride. In rare earth nitrates, cesium lowers the intensity of gadolinium and yttrium emission. A method is developed for the determination of gadolinium and yttrium mixtures of rare earth oxides. The concentration of analytical solutions was about 100 $\mu\text{g}/\text{ml}$ of rare earth oxide. Orig. art. has: 4 tables and 6 figures.		
ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN UkrSSR, Laboratorii v Odesse (Institute of General and Inorganic Chemistry AN UkrSSR, Odessa Laboratory)				
SUBMITTED: 28Mar64	ENCL: 00	SUB-CODE: MM, IC		
NO REF GOV: 008	OTHER: 014			
Card 2/2				

OVCHAR, L.A.; CHMYR', A.D.

Effect of gamma rays of the radioisotope Co<sup>60</sup> on the germinating power and respiration intensity of dry corn. Izv. vys. ucheb. zav.: pishch. tekhn. no. 2:11-13 '58. (MIRA 11:10)

1. Odesskiy tekhnologicheskiy institut imeni I.V.Stalina, Kafedra biokhimii zerna.

(Gamma rays--Physiological effect)  
(Corn(Maize))

OVCHAR, L.A.

Some biochemical properties of cornstarch. Izv. vys. ucheb.  
zav.: pishch.tekh. no.2:10-13 '60. (MIRA 14:7)

1. Odesskiy tekhnologicheskiy institut imeni I.V. Stalina,  
kafedra biokhimii zerna.  
(Cornstarch)

OVCHAR, L.A.

Method for determining the weight ratio of anatomic particles  
of the corn kernel. Izv. vys. ucheb. zav.; pishch. tekhn. no.3:  
148-149 '60.  
(MIRA 14:8)

1. Odesskiy tekhnologicheskiy institut im. I.V. Stalina,  
Kafedra biokhimii zerna.  
(corn (Maize))

POLUEKTOV, N.S.; OVCHAR, L.A.; MEL'NIKOV, V.P.

Modulation of the radiation characteristics of a flame under the effect of an electric field. Zhur. fiz. khim. 37 no.11, 1963.  
2585 N°63. (MIRA 11).

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

POLYERKOV, N.S.; OVCHAR, L....

Extraction of rare earth elements as ternary salicylate-pyridine complexes. Zh. neorg. khim. 14:154-159 '63.  
(MIRA 16:11)

OVCHAR, I.L.

Selecting bottom hole equipment for test drilling using small  
turbodrills. Trudy MGRI 34:118-133 '59. (MIRA 13:12)  
(Boring machinery)

CVCHAR, I. I. Master copy 5-1 (1986) - 10728-1 and 10728-2  
using turbine driven trimotor aircraft prospecting world. Below, in parentheses,  
the higher risk, low cost area. Prospecting East Asia and Australia.  
110 copies (K1, No. 1, etc.)

OVCHAR, I.L.

Turbodrilling multi well penetrations curving abruptly from one  
point of origin. Trudy MGRI 1:100-137 '56. (MLRA 2:11)  
(Oil well drilling)

СОЛНЦЕВАЯ  
БИБЛИОТЕКА

AUTHORS: Poluektov, N. S., and Ivshin, L. A.

TITLE: Anion Effect in the Determination of the Elements of Rare Earths by the Method of Flame Photometry

PERIODICAL: Zavodskaya laboratoriya, 1966, Vol. 14, No. 1, p. 44-47

TEXT: The effects of acids and salts on the results of flame photometry were investigated. The authors used a spray apparatus, an acetylene - air flame, and a spectrophotometer with automatic recording of the spectrum, which was equipped with a monochromator of type АМ-2 (UM-1), a photomultiplier of type Ф3У-1-М (FEU-1M) and Ф3У-27 (FEU-1P), and an automatically recording potentiometer 300U-1 (EPF-04). Fig. 1 gives graphical representations of the dependence  $I \propto I = \varphi(\log C)$  for the wavelength of yttrium 613 m $\mu$ . From the data obtained one may conclude that the atomization of nitrates into the flame does not cause the quantitative evaporation of yttrium from the aerosol particles. This is due to the formation of a difficultly volatile oxide during the vaporization of the salt. The photometry of the spectra of the chloride salts of rare earths.

Card 1/5

Anion Effect in the Determination of the Elements of Rare Earths by the Method of Flame Photometry

of the peak of the molecular bands of rare earths which are due to the presence of  $H_2SO_4$  or  $H_3PO_4$ . It denotes the difference between the theoretical and the actual concentrations of rare earths. The investigation showed that the formation of trifluoromethyl sulfide, trifluoromethyl nitrate (nitrites) or sulfates and phosphates during the flame photometric determination of rare earths is due to the anion effect. In the latter case, the method of isomolar series allows the determination of the compound formed: in the sulfates, Eu and Yb are tetravalent, Er and Y are trivalent. In the phosphates all of the four rare earths investigated are trivalent. There are 3 figures, 1 table, and 7 references. 1 Soviet, 1 French, 1 Japanese, 1 Argentine, 1 British, and 1 US.

ASSOCIATION: Institut für Anorganische Chemie der Universität zu Köln  
'Institut für Anorganische Chemie der Universität zu Köln'  
Cologne, FRG

Card 3/3

S/032/60/026/010/021/03  
B016 BC54

AUTHORS: Poluektov, N. S., Ovchar, L. A., Kuchment, M. M., and  
Nikol'skiy, M. A.

TITLE: The Use of a Spectrophotometer СΦ-4 (SF-4) for the Purposes  
of Flame Photometry 28

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 10,  
pp. 1152-1154

TEXT: Spectrophotometers with automatic scanning of the spectrum and spectrum recording offer special advantages in flame photometry. The following instruments are produced in the USSR: ИСП-51 (ISP-51)<sup>28</sup> with an accessory instrument ФЭП-1 (FEP-1), ПС-384 (PS-384)<sup>28</sup> and the spectrophotometers СП-61 (SP-61), ДФС-4 (DFS-4),<sup>28</sup> and ДФС-14 (DFS-14).<sup>28</sup> Their suitability for flame analysis has, however, not yet been clarified. Previously (Ref. 5), the authors had described a recording instrument which was constructed on the basis of a universal monochromator УМ-2 (UM-2).<sup>26</sup> This instrument is particularly suited for the determination of some individual rare-earth elements. The authors designed an

Card 1/3

The Use of a Spectrophotometer  $C\Phi$ -4 (SF-4) for the Purposes of Flame Photometry S/032/60/026/010/023/035  
B016/B054

instrument of a similar type having quartz optics and permitting the determination of elements on the basis of lines of the ultraviolet part of the spectrum. For this purpose, they used a spectrophotometer for absorption measurements  $C\Phi$ -4 (SF-4). The photocells were replaced by photomultipliers  $\Phi\exists y$ -18 (FEU-18)<sup>27</sup> for the visible and ultraviolet spectrum range, as well as  $\Phi\exists y$ -22 (FEU-22)<sup>27</sup> for the infrared range. The output of the photomultiplier was led into the cathodic repeater which was connected with the input of the electronic recording potentiometer  $\Pi C1-02$  (PS1-02)<sup>27</sup>. The photomultipliers were fed by a high-voltage rectifier BC3-2500 (VSE-2500).<sup>27</sup> Fig. 1 shows a block diagram of the apparatus. The revolving mechanism for the drum of the wavelength scale is shown in Fig. 2. Table 1 gives the times required for adjusting the picture of the spectral line to the exit slit (0.1 mm) for different wavelengths. Table 2 shows the sensitivity of determination for individual elements. Table 3 shows the reproducibility of line-recording for copper and magnesium. The attainable accuracy is higher than that of ordinary spectrophotometers. The design suggested guarantees determination of various elements with high accuracy. There are 3 figures, 3 tables, and 5 references, 1 Soviet and 4 US.

Card 2/3

POLUEKTOV, N.S.; POPOVA, S.B.; OVCHAR, L.A.

Flame spectrophotometer with a spectrum recorder and its uses.  
Zhur.anal.khim. 15 no.2:131-137 Mr-Apr '60. (MIRA 13 7)

1. Institut obshchey i neorganicheskoy khimii AN USSR laboratorii  
v odesse.

(Spectrophotometer) (Flame--Spectra)

S/075/60/015/02,01,004  
B005/B006

AUTHORS Poluektov, N S . Popova, S B , Ovchar, L A

TITLE A Recording Flame Spectrophotometer and Its Use

PERIODICAL Zhurnal analiticheskoy khimii, 1960, Vol 15 No 2,  
pp. 131-137

TEXT: Flame spectrophotometers using monochromators of the type YK-2 (UM-2) (Refs 1,2) or attachments type CQ-4 (SF-4) (Ref 3) have several disadvantages for flame photometric determination of elements in high dilution which are described in the introduction to the present paper. In a previous paper, (Ref. 7) the authors described a recording spectrophotometer with increased spectrum range for the determination of certain rare-earth metals. In the present paper, an instrument of the same type is applied for determining several other elements. Apparatus applied and mode of operation are described in detail. The spectrophotometer consists of a universal monochromator type YK-1 (UM-1) connected with a mechanism for turning the wave-length drum (Fig. 1) and

Card 1/3

**A Recording Flame Spectrophotometer  
and Its Use**S/075/60/015/02/01 C-4  
B005/B006

an electronic recording potentiometer type IKC-1-02 (PS-1-02). A Figure illustrates the circuit diagram of the cathode follower applied. The anode of a photomultiplier type  $\Phi\gamma Y$ -19 (FEU-19) (for elements with bands in the visible range or type  $\Phi\gamma Y$ -22 (FEU-22) (for the infrared range) was connected to the grid of the cathode follower. The accuracy of determinations depends on the ratio of the records for the background and the peaks of the lines. Table 1 shows the deviations in the record of lithium lines (at various concentrations) in the presence of large amounts of sodium. It is evident that the recording photometer described guarantees a much higher accuracy than it is attainable by measurements involving galvanometer readings. In the present paper, a detailed description of flame-photometric determination of the following elements is given: lithium in NaCl; rubidium in the presence of large amounts of potassium, calcium impurities in strontium salts and salts of rare-earth metals (with two Tables of analytical data), strontium in sea water, and manganese in presence of large amounts of potassium. Lines recorded by the spectrophotometer in the above six determinations are shown in six Figures. The recording spectrophotometer described in this paper has

Card 2/3

POLUJEKTOV, N.S.; VITKUN, R.A.; OVCHAR, L.A.

Relation between radiation intensity and the concentration of  
18 elements in the flame-photometric method of analysis.  
Zhur.anal.khim. 15 no.3:264-271 My-Je '60.  
(MIRA 13:7)

1. Institute of General and Inorganic Chemistry, Academy of  
Sciences, Ukrainian S.S.R., Laboratories in Odessa.  
(Flame photometry)

OVCHAR, L.A.

Chemical composition of hybrid forms of corn of the southern Ukraine. Izv.vys.ucheb.zav.; pishch.tekh. no.3:32-33 '59.  
(MIRA 12:12)

1. Odesskiy tekhnologicheskiy institut imeni I.V.Stalina.  
Kafedra biokhimii zerna.  
(Ukraine--Corn(Maize)--Analysis)

CHMYR, A.D. [Chmyr, A.D.]; OVCHAR, L.A.

Effect of gamma rays of radioactive cobalt Co<sup>60</sup> on the activity  
of corn grain enzymes. Ukr.biokhim.zhur. 31 no.1:31-34 '59.  
(MIRA 12:6)

1. Department of Grain Biochemistry of the Odessa Technological  
Institute.

(GAMMA RAYS--PHYSIOLOGICAL EFFECT) (CORN (MAIZE)) (ENZYMES)

SAMOLYAK, Ye.M., inzh.; OVCHAR, Z.L., inzh.

Instrument used for rapid analysis of a propane-butane mixture  
in the air. Sudostroenie 24 no. 6:61-62 Je '58. (MIRA 11:8)  
(Gas detectors)

OVCHARUK, Ye.L., inzh.

Divided servicing of subscribers equipment on municipal telephone networks of the Ukrainian S.S.R. Vest. svyazi 20 no.8:21-22 Ag'60. (MIRA 13:10)

1. Otdel gorodskikh telefonnykh svyazey Ministerstva svyazi USSR.  
(Ukraine--Telephone)

OVCHARENKO, A.A.

Leadership aid given by the Lvov Prospecting Expedition to a  
collective farm. Razved. i okh. nedr 28 no.12:52-53 D '62.  
(MIRA 16:5)

1. Ukrainskiy respublikanskiy komitet professional'nogo soyusa  
rabochikh geologorazvedochnykh rabot.  
(Lvov Province—Collective farms) (Prospecting)

OVCHARENKO, A.A.

Republic Conference on Problems of Labor Protection and Safety  
Engineering. Razved. i okr. nedr 27 no.12:37-58 b '41  
(MIRA 1958)

1. Ukrainskiy respublikanskiy komitet profsoyuza rabochikh  
geologorazvedochnykh rabot.  
(Prospecting--Safety measures)

~~OVCHARENKO A.A.~~

Scientific and technical conference of Ukrainian geologists. Geol.  
zhur. 17 no.1:89-91 '57. (MLRA 10:4)  
(Ukraine--Geology--Congresses)

OVCHARNIKO, A.A., inzhener (g. Omsk); CHETVERTUKHIN, N.A., inzhener (g. Omsk)

Electrified fence. Put.1 put.khos. no.4:45 Ap '57.

(MLRA 10:5)

(Electric fences)

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

J. COMMUN. STUD., Vol. 10, No. 1

19. The following table gives the number of cases of smallpox reported in each State during the year 1802.

... math ... ,

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

USSR / Soil Science - Physical and Chemical Properties of Soils. J

Abs Jour : Ref Zhur Biol., N 22, 1958, 179-183

Author : Ovcharenko, A.P.

Inst : Institute of Soil Science, AN GruzSSR

Title : The Problem of Application of Tensiometers for the Determination of Differential Soil Moisture.

Orig Pub : Tr. In-ta pochvoved. AN GruzSSR, 1956, 1, 183-186

Abstract : No abstract.

Card 1/1

- 25 -

USSR / Cultivated Plants. Cereals.

Abs Jour : Ref Zhur - Biol., io 5, 1958, No 34594

Authors : Akhvlediani, G. K.; Ovcharenko, A. D.

Inst : AS GruzSSR

Title : Duration of the Effects of Perennial Grasses Grown on Humus-Sulfate Mulch at Samgori.

Orig Pub : Tr. In-ta pochvoved. AN GruzSSR, 1957, 8, 89-95.

Abstract : Report on experiments conducted over a period of three years on the after-effects of perennial grass on the yield of cereals in irrigated soils at Samgori. In these three years, perennial grass were shown to have accumulated considerable reserves of organic matter, thus improving the physical and chemical properties of the soil. After the plowing under of perennial grass,

Card 1/2

KAS'YANOV, S.P., inzhener; OVCHAREMKO, A.I., inzhener; POLISHCHUK, P.Ya., inzhener.

Methods of improving the mechanization of work in metallurgical plants.  
Mekh.trud.rab.10 no.4:8-13 Ap '56. (MLRA 9:7)  
(Metallurgical plants)

KAS'YANOV, S. P., inzhener; OVCHARENKO, A. I., inzhener

Mechanization of loading and unloading in metallurgical plants.  
Mekh. trud. rab. 9 no.5:5-9 My '55. (MLRA 8:?)  
(Loading and unloading)

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

OVCHARENKO, A.P., KOROLEVKA, N.M., MICHAILOVA, G.N.

Gas analyzer for determining the hydrogen sulfide content  
in gases. Gaz.prom. 10 no.11:46-48 '65.

(MIRA 19.1)

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

OVCHARENKO, A.P.

Properties of hydrolytic lignin of cotton hulls. V. O. Panayuk, A. M. Veselovskii, and A. P. Ovcharenko. Chem. Technol. Inst., Dnepropetrovsk, Ukraine. Lenkhim. Prom. 8, No. 4, 16-18 (1955); cf. C.A. 49, 4885e. Hydrolytic lignin from cotton hulls was heated under 40-45 atm., under 1 atm., ~~and in vacuo~~. The vacuum treatment made it possible to carry away substances formed during the reaction, and prevented cracking and formation of charcoal from gaseous material. Lab. expts. under 40-50 mm., lignin alone or mixed to a paste with the heavy fraction of tar from a preceding expt., in proportions of 1:1 and 3:5, at a final temp. of 500° and duration of heating 1.5-2.0 hrs. gave 47.8-63.2% of hard residue, and 10.0-33.6% of tar; the rest consisted of water, gas, and loss. A catalyst of iron partially reduced in H caused an increase in the amount of gases, and had an unfavorable effect on the yield of tar. The tar obtained in these reactions had a fraction boiling between 180 and 200° forming two layers, with nD<sub>20</sub> 1.4617 and 1.5076. One fraction was composed of 15% phenols, and up to 80% of neutral substances. The phenol fraction represented 9.05%, and hydrocarbon fraction 8.7% of the lignin. Analogous expts. on a plant scale, gave a tar fraction of up to 25% of the lignin, of which more than 7% consisted of phenols, and 15% neutral substances (hydrocarbons). The ratio lignin:tar in the paste (optimum 1:1.25), and time of reaction (optimum 4 hrs.) seemed to be the deciding factors in the process. The hydrocarbon fraction contained aliphatic and aromatic compds. in a yield of 7.3% of the dry lignin. Phenol fractions have been considered as a source for resins, and the charcoal could be utilized as an adsorbent. T. Jurek.

OVCHARENKO, A.P., (Ufa, Salavat)

Manufacture of prestressed concrete reinforcement panels containing  
six hollows. Stroi.pred. neft.prom.2 no.1:5-9 Ja '57.

(MLRA 10:3)

1. Nachal'nik Eksperimental'nogo konstruktorskogo byuro po zhelezobetonu pri Vsesoyuznom nauchno-issledovatel'skom institute po stroitel'stvu Ministerstva stroitel'stva predpriyatii nefteyanoy promyshlennosti SSSR.

(Prestressed concrete construction)

OVCHARENKO, A.Ya.; AFANAS'YEVA, N.K.

Analysis of the work of some plants. TSement 29 no.1:3-4 Ja-P '63.  
(MIR 16:2)

1. Novorossiyskprotsement.  
(Cement plants)

VOROB'YEV, A.A.; MOZHAYEV, N.S.; OVCHARENKO, A.V.; SAVCHENKO, D.A.;  
SHPIL'MAN, I.A.

Plan for regional prospecting for oil and gas in Orenburg  
Province. Geol. nefti i gaza 6 no.12:37-41 D '62. (MIRA 15:12)

1. Orenburgskoye geologicheskoye upravleniye i trest

Orenburgneftegazrazvedka.

(Orenburg Province—Gas, Natural—Geology)

(Orenburg Province—Petroleum geology)

OVCHARENKO, A.V.

Method of preparing areas for deep drilling in Orenburg Province.  
Geol. nefti i gaza 7 no.6:32-38 Je '63. (MIKA 16:9)

1. Zapadnaya geologo-pis'kovaya ekspeditsiya orenburgskogo geolo-  
gicheskogo upravleniya.

CHAPMAN & HALL LTD., LONDON.

The effectiveness of dust removal in insulation  
is no better than 80-85%.

• Научно-исследовательский и проектный институт по газодинамике  
и гидродинамике генерации газа в Украине (ГИГУ) в г. Днепропетровске.  
Составлено в 1974 году в НИИ ГИГУ.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R0012380

KAZARNOVSKIY, Ya.S.; SEMENOV, V.P.; OVCHARENKO, B.G.; TSYPIN, A.N.;  
KLOODEYEV, I.P.; LITVINCHUK, V.A.

Certain problems of the layout of equipment for the oxidative  
thermal pyrolysis of hydrocarbon gases. Khim.prom. no.1:11-15  
Ja '61. (MIRA 14:1)

(Hydrocarbons) (Oxidation)  
(Pyrolysis)

S/064/61/000/001/002/011  
B110/B215

AUTHORS: Kazarnovskiy, Ya. S., Semenov, V. P., Ovcharenko, B. S.,  
Tsypin, A. N., Kolodeyev, I. P., Litvinchuk, V. A.

TITLE: Problems of apparatus design for the thermooxidative pyrolysis  
of hydrocarbon gases

PERIODICAL: Khimicheskaya promyshlennost', no. 1, 1961, 11-15

TEXT: The pyrolysis of hydrocarbon gases for the production of C<sub>2</sub>H<sub>2</sub> and  
synthesis gas takes place at 1450-1500°C. Since the intermediate C<sub>2</sub>H<sub>2</sub> must  
not remain in the reaction zone for more than 0.003-0.01 sec, short tongues  
of flame must be used. As the traditional apparatus by Sachse and Bartho-  
lomé with maximum production of C<sub>2</sub>H<sub>2</sub> of 3500-5000 tons per year is no longer  
sufficient, a new more efficient apparatus has to be designed. Highly turbu-  
lent combustion increases the rate of flame propagation and shortens the  
tongue considerably. The method of methane pyrolysis applied by B.S.Grinenko  
yielded high C<sub>2</sub>H<sub>2</sub> concentrations. Its industrial application, however, is

Card 1/7

Problems of apparatus design for...

S/064/61/000/001/002/011  
B110/B215

rendered difficult due to the almost critical velocity of the gas of 200-250 m/sec required for it, due to the high initial temperature ( $700-900^{\circ}\text{C}$ ) of the oxygen necessary for the combustion stabilization (7% of the total amount), and due to an increase in temperature of the reaction channel of up to  $2000^{\circ}\text{C}$ . A pilot plant for average gas velocities and efficiencies of approximately  $160 \text{ Nm}^3/\text{hr}$  is described. The conical ring nozzle of the burner contained whirl blades. The  $\text{CH}_4/\text{O}_2$  mixture flowed into the reaction channel at  $400^{\circ}\text{C}$  and approximately 150 m/sec. The oxygen used for stabilization was only 5% of the total  $\text{O}_2$  content. Maximum temperature in the reaction zone was  $1450^{\circ}\text{C}$ ; gas velocity: approximately 100 m/sec; its stay: 0.002 sec. The acetylene yield was 8 to 9.4% of the reaction gases plus deposition of carbon black; 3 to 3.5 g/ $\text{Nm}^3$  of the initial mixture; ratio  $\text{O}_2$  consumption = 0.62 to 0.64. According to the author, transition from pilot stage to industrial stage would be most suitable by increasing the number of burners. Fig. 1 shows the pilot plant of 1958. Coke oven gas of the ammonia unit compressed up to 0.36 atm by compressor (4), is purified in cloth filter (5).

Card 2/7

Problems of apparatus design for...

S/064/61/000, 001, 002, 011  
B110, B215

and conveyed to the preheating oven (3). Industrial oxygen compressed up to 0.38 atm by a XK -3 (ChK-3) compressor 1 is also conducted into the pre-heating oven via water separator (2) and filter (5). There,  $C_2$  is heated to  $350^{\circ}C$ , and the coke oven gas to  $450^{\circ}C$ . From mixer (6), the mixture is at a temperature of  $300^{\circ}C$  conducted into burner (7) and reaction vessel (8) (13) where the latter were purified from carbon black, they pass the water separator and filter before they are used for the production of acetylene. The triple burner of Fig. 3 which is used by the authors, has four spirals for producing whirls. Stabilizing  $C_2$  is conducted through their axles. The following parameters have to be observed exactly to attain an optimum course of reaction: consumption of  $C_2$  and hydrocarbon gas, temperature of pre-heating, ratios  $[O_2] : [\sum C_i]^2$  in the initial mixture, and amounts of water. The following control and regulation apparatus were used: ДИМ-270 (DIM-270), ДП-410 (DP-410), ДП-280 (DP-280), М(Ш-Дп-54 (MSSh-Pr-54), БДН-09 (BDN-09), and 2РЛ:24В (2RL:24V) on АУС(AUS) blocks. The following average composition

Card 3, ✓

Problems of apparatus design for...

S/064, 61/000, 001, 002, 011  
B11C/B215

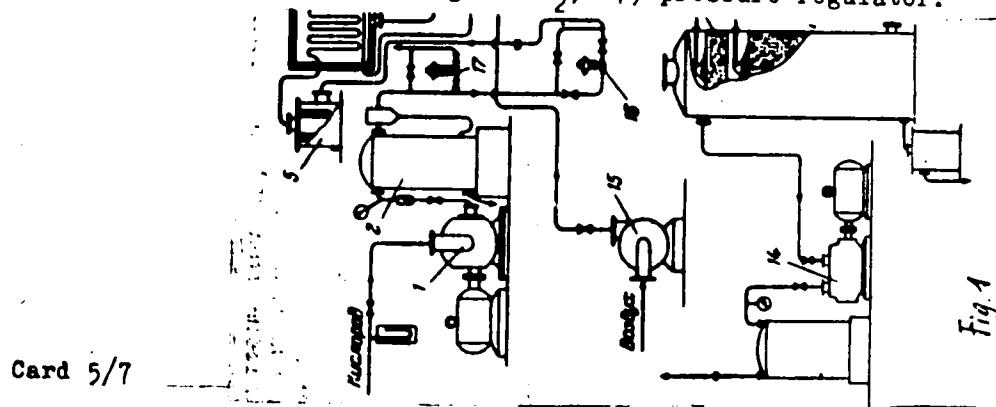
of the initial gas was determined:  $C_2H_4 = 3\%$ ,  $O_2 = 0.8\%$ ;  $CO = 13.8\%$ ;  $H_2 = 6.7\%$ ;  $CH_4 = 62\%$ ;  $N_2 = 13.7\%$ . For stabilizing the flame, 1% of the total oxygen (79 to 98% of  $O_2$ ) was required. The temperature of the reaction channel was approximately  $13^{\circ}C$ , that of the reactor block  $30^{\circ}C$ . The total time of reaction was 500 hr, ratios  $[CO] : [CH_4 + C_2H_4] = 1.1 : 1.1$ . Optimum yield of  $C_2H_2 = 7.5\%$ , its average = 6.4%; total cracking = approximately 30%, effective cracking approximately 30%. The adiabatic temperatures of the reaction were lower than that of the hydrogen formation according to  $CO + H_2O = CO_2 + H_2$ . The temperature of preheating ( $500^{\circ}C$ ) probably causes a reduction in  $O_2$  consumption by 10%. The method is suited for supplementing the production of nitrogen fertilizers for which hydrogen is obtained from coke oven gases. A percentage of approximately 4%  $NH_3$  per t of  $C_2H_2$  was obtained. There are 3 sources, tables, and references: 4 Soviet-pubs and 2 non-Soviet-pubs.

Card 417

Problems of apparatus design for...

S/064/61/000/001/002/011  
B110/B215

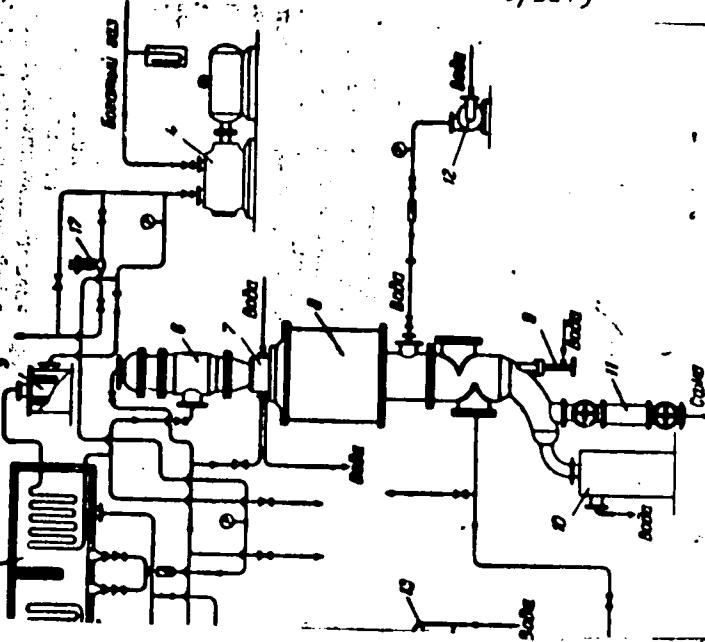
Legend to Fig. 1: basic diagram of a semi-industrial plant for the thermo-oxidative pyrolysis of hydrocarbon gases, 1) compressor  $\text{Kh}-3$  ( $\text{KhK}-3$ ); 2) receiver-water separator, 3) oven for preheating gas 4) compressor  $\text{Py}-\text{T}$  ( $\text{RUTT}$ ), 5) cloth filter, 6) mixer, 7) burner, 8) reaction vessel, 9) carbon black separator, 10) water seal, 11) bunker for carbon black (coke), 12) centrifugal pump, 13) scrubber, 14) gas pump  $\text{RMK}-4$  ( $\text{RMK}-4$ ), 15) air pump, 16) regulator for the ratio gas:  $\text{O}_2$ , 17) pressure regulator.



Problems of apparatus design for...

S/064/61/000/001/002/011  
B110/B215

Card 6/7

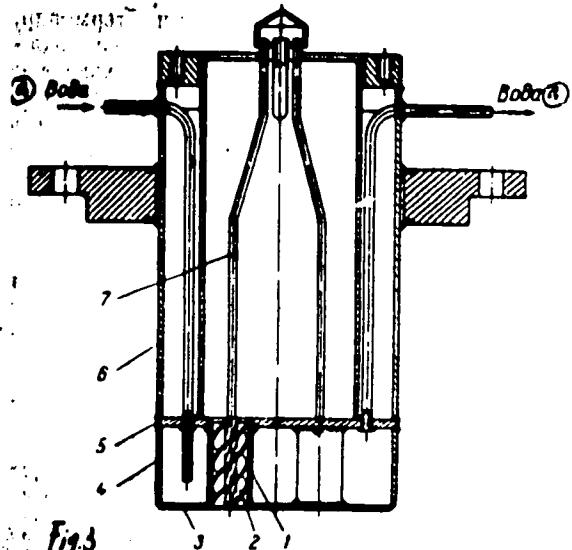


5

Problems of apparatus design for...

S/064/61/000/001/002/011  
B110/S215

Legend to Fig. 3: triple burner,  
1) socket, 2) whirl spiral,  
3) bottom of burner, 4) shell,  
5) partition, 6) burner housing,  
7) tube for stabilization oxygen,  
a) water.



Card 7/7

28(5)

SOV/64-59-3-13/24

AUTHORS: Ovcharenko, B. G., Golovko, A. P., Vosvilov, N. M., Avilova, M. K.

TITLE: Experiment of Applying a Column of the Ammonia Synthesis With  
a Top GIAP-DATZ (Opyt ekspluatatsii kolonn sinteza ammiaka s  
nasadkoy GIAI-DATZ)

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 3, pp 82-85 (USSR)

ABSTRACT: Until recently the Dneprodzerzhinskiy azotnotukovyy zavod  
(Dneprodzerzhinsk Nitrogen Fertilizer Works) used a supple-  
mented attachment according to Fauser with two tubular heat  
exchangers and a secondary pipe for supplying cold gas (Fig 1).  
It was found out however, that this attachment does not offer  
optimum temperature conditions. In 1950 a new type of attach-  
ment was developed in the GIAP by S. S. Lachinov and  
constructed in the DATZ in two constructional types (Fig 2).  
The attachment has two heat exchangers in the catalyst chamber,  
and 2 secondary pipes for the supply with cold gas, and it is  
called GIAP-DATZ (abbr. GD-2). Some data are given on the  
application of a column ( $D = 0.85$ ,  $H = 14$  m) with a attachment  
GD-2 and iron catalysts with two accelerators ( $K_2O$  and  $Al_2O_3$ ).

Card 1/2

**Experiment of Applying a Column of the  
Ammonia Synthesis With a Top GIAP-DATZ**

SC7/64-59-7-19, 24

The results achieved after 1- and 6 months of its application (Table 1) show that  $\Delta\% \text{NH}_3 \approx 12.5$  ( $\Delta \text{NH}_3$  = difference in % of the  $\text{NH}_3$  content before and after the column) and the maximum capacity amount to 120-125 t/day, while it only was 100 t/day with the old type. Corresponding experiments were carried out in order to examine the effect of the second secondary pipe for cold gas on the increase of the capacity after one year, the results are given (Table 2). A column with an attachment GD-2 can work very stably, also with a gas supply up to 30% through the second secondary cold gas pipe, this caused an increase in the capacity by 70%. Examinations carried out during 20 days on a column which already had worked for 1.5 months showed (Table 3) that 140 t  $\text{NH}_3$ /day are yielded with  $\Delta\% \text{NH}_3 \approx 13$  and with a gas circulation of about 70,000  $\text{Nm}^3/\text{hour}$ , with the attachment GD-2 on the active catalyst. There are 2 figures and 3 tables.

Card 2/2

KAZARNOVSKIY, Ya.S.; KAKHOV, N.V.; KADALOV, F.I.; OVCHARENKO, B.O.

Production of synthesis gas by high temperature conversion of hydrocarbon gases at high pressure. Khim.prom. no. 307-1962. M.I.A. 1962.

(Hydrocarbons) (Water, gas)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R0012380

KABANOV, F.I.; KARKHOV, N.V.; KAZARNOVSKIY, Ya.S.; OVCHARENKO, B.G.;  
Prinimal uchastiye: ZUYEV, V.I.

Production of process gas by the high temperature conversion  
of natural gas at elevated pressure. Khim.prom. no.9:547-555  
Ag '2.  
(MIRA 15:9)

(Gas, Natural)  
(Gas manufacture and works)

GANZ, S.N.; BRAGINSKAYA, R.I.; GORODETSKIY, N.I.; LOKSHIN, M.A.  
Prinimali uchastiye: SLASHCHEVA, V.M.; MOLCHANOV, V.A.;  
OVCHARENKO, B.G.

Absorption of nitrogen oxides by milk of lime in mechanical  
absorbers of a pilot plant. Izv.vys.ucheb.zav.; khim.i khim.  
tekhn. 5 no.1:155-159 '62. (MIRA 15:4)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut imeni  
F.E.Dzerzhinskogo, kafedra tekhnologii neorganicheskikh veshchestv.  
(Nitrogen oxides) (Lime)

KAZARNOVSKIY, Ya.S.; OVCHARENKO, E.G.; SEMENOV, V.P.; DEREVYANOV, I.U.

Process gas obtained by the high temperature conversion of hydrocarbon gases. Gaz.prom. ? no.1:43-50 '62. (MIRA 1:1)  
(Gas, Natural) (Gas manufacture and works)

OVCHARENKO, B.G.; KOVPAKOVA, R.F.

Nitrogen oxides in fuel gases and their determination. Koke 1  
khim. no. 3:21-26 '61. (MIRA 14:4)

1. Gosudarstvennyy komitet Soveta ministrov SSSR po khimii (for  
Ovcharenko). 2. Dneprodzerzhinskiy filial Gosudarstvennogo  
instituta azotnoy promyshlennosti (for Kovpakova).  
(Coke—Oven gas) (Nitrogen oxide)

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

OVCHARENKO, B.P., gornyy insh.

Conditions affecting the modification of the coefficient of friction  
and the performance of OK-150 and OKU-type battery stulls. Ugol' Ukr.  
2 no.2:12-17 F '58. (MIRA 13:3)  
(Mine timbering)

KOGAN, A.B., inzh.; IVANOV, M.M., inzh., DUBOV, Ye.D., inzh.;  
OVCHARENKO, B.P., kand.tekhn.nauk

Using hydraulic struts in Donets Basin mines. Sbor.DonUGI  
(MIRA 16:6)  
no.26. 3-42 '6.  
(Donets Basin--Mine timbering--Equipment and supplies)

OVCHARENKO, B.P.

Effect of mining conditions on the performance of OK-type  
battery stulls. Zap.Len.gor.inst. 36 no.1:38-53 '58.  
(MIRA 12:4)  
(Mine timbering--Testing)

OVCHARENKO, D.A.

Age-related changes of the helminth fauna of Japanese deer  
kept in a park in the Far East. Vest. IGU 18 no.15:5-11'63.  
(SOVIET FAR EAST—PARASITES—DEER) (MIRA 16:9)  
(SOVIET FAR EAST—WORMS, INTESTINAL AND PARASITIC)

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

OV-50-286-1-2-A

CONFIDENTIAL - This document contains neither recommendations nor conclusions of the FBI. It is the property of the FBI and is loaned to your agency; it and its contents are not to be distributed outside your agency without the express written consent of the FBI. Your agency will return the document to the FBI when requested.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

OVCHARENKO, D.A.

Burycephalus degieli gen.nov.sp.nov., a new trematode from the host  
bittern (*Buteo buteo*). Dokl. AN SSSR 104 no.1:150-152 S '55. (MLRA 9:2)

1.Dal'nevostochnyy filial Akademii nauk SSSR. Predstavlene akademikom  
K.I.Skryabinym.  
(Trematoda)

OVCHARENKO, D.Z., insh.

Labor productivity at ore dressing and agglomeration plants  
under the Vysokaya Mountain mine administration. Gor. zhur.  
no. 1:32-34 Ja '59. (MIRA 12:1)

1. Vysokogorskoye rudoupravleniye Bishne-Tagil'skogo kombinata.  
(Vysokaya Mountain--Mine management) (Ore dressing)

OVCHARENKO, E.

107-57-5-26/63

AUTHOR: Ovcharenko, E.

TITLE: Long-Distance VHF Propagation (Dal'neye rasprostraneniye UKV)

PERIODICAL: Radio, 1957, Nr 5, pp 22-23 (USSR)

ABSTRACT: Recently a conference on long-distance vhf propagation was held in Moscow; it was organized by these three organizations: Nauchno-tehnicheskoye obshchestvo radiotekhniki i elektrsovyyazi imeni A.S. Popova (Scientific and Engineering Society of Radio-Engineering and Electrocommunication), Vsesoyuznyy nauchnyy sovet po radiofizike i radiotekhnike AN SSSR (All-Union Scientific Council for Radiophysics and Radio Engineering, AS USSR), Institut radiofiziki i elektroniki AN SSSR (Institute of Radio Engineering and Electronics, AS USSR). Over 250 persons took part in the activities of the Conference; among them scientists and professors from Leningrad, Khar'kov, Gor'kiy, Odessa, Tomsk, and other cities. Fifteen reports were delivered and discussed, of which 6 were devoted to vhf tropospheric scatter propagation. Professor A.G. Arenberg, Doctor of Technical Sciences, opened the Conference. A brief outline of today's investigations and uses of tropospheric propagation is presented in the article. Professor A.N. Kazantsev delivered a report on the "Diffused Propagation of Meter Radio Waves in the Ionosphere" in which he briefly reviewed the materials of the Eighth Plenary Conference of the International Consultative Committee for Radio (Warsaw, September 1956). American and Canadian commercial scatter-propagation communication lines were mentioned.

Car

Card 1/3

OVCHARENKO, F., akademik

To make rivers clean. NT0 5 no. 7:33-35 J1 't3. (MIRA 1c:8

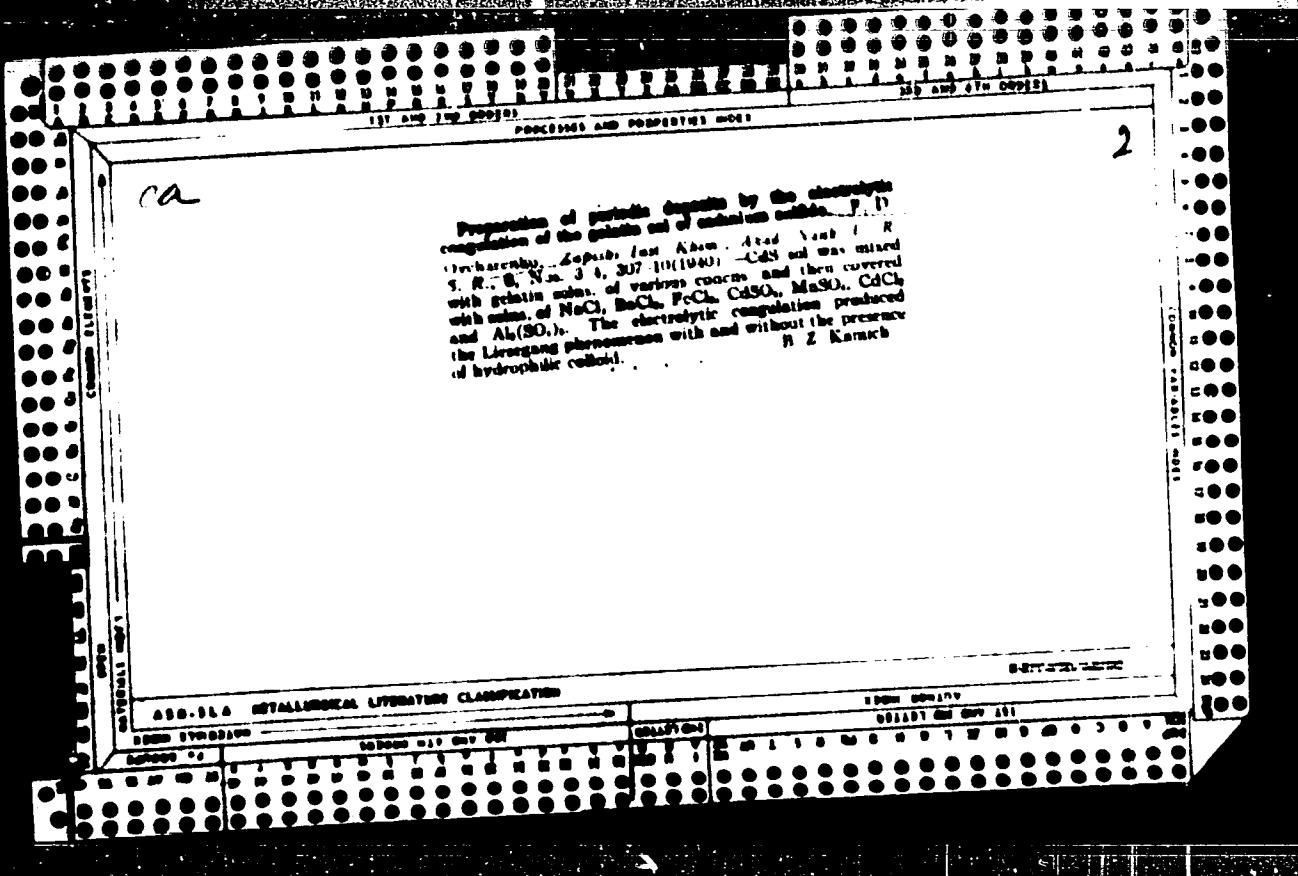
1. AN UkrSSR, predsedatel' otdeleniya khimicheskikh i geologicheskikh nauk AN UkrSSR, chlen prezidiuma Vsesoyuznogo khimicheskogo obshchestva imeni Mendeleyeva.  
(Water—Purification)

SHVETS, Ivan Trokhimovich [Shvets', I.T.]; OVCHARENKO, Fedor Danilovich,  
akademik; DOBROKHOTOV, Nikolay Nikolayevich [Dobrokhotov, M.M.],  
akademik, zasluzhennyy deyatel' nauki i tekhniki USSR;  
STUDENNIKOV, Timofey Vasil'yevich [Studennykov, T.V.]; RAKUMA,  
, Pavel Fedorovich, akademik; DMITRENKO, Petr Alekseyevich  
[Dmytrenko, Petro Oleksiiovych]

Congress of conquerors. Znan. ta pratsia no.10:1-5 O '61.  
(MIRA 14:8)

1. Rektor Kiyevskogo gosudarstvennogo universiteta im. T.G. Shevchenko (for Shvets).
2. AN USSR (for Ovcharenko).
3. Nachal'nik upravleniya transporta i svyazi Ukrainskogo sovmarkhoza (for Studennikov).
4. Chlen-korrespondent Ukrainskoy Akademii sel'skokhozyaystvennykh nauk (for Dmitrenko).

(Russia—Economic conditions)



CA

2  
Periodic precipitation of copper chromate in agar by co-  
agglomeration method. S. D. Chatterjee, Kallid. Ztsr.  
II, 1950-4 (1950). - Solutions of  $\text{Cu}(\text{OH})_2$  (0.08 M) and of  $\text{K}_2\text{CrO}_4$  (0.08 M), each in 0.5% agar, were mixed at 60° and  
allowed to set, after which a  $\text{K}_2\text{CrO}_4$  soln. ( $x$  M) was placed  
on the gel surface. Spirals or rings of congealed  $\text{CuCrO}_4$   
appeared, the distance between which was 0.8 mm. at  $x =$   
1.0 and 0.8 at  $x = 0.1$ . When  $(\text{NH}_4)_2\text{CrO}_4$  was used in  
place of  $\text{K}_2\text{CrO}_4$  in one or both solns., rings had no spirals  
appended. When the precipitating electrolyte was  $\text{CuSO}_4$ ,  
 $\text{K}_2\text{SO}_4$ ,  $\text{NaCl}$ ,  $\text{BaCl}_2$ , etc., there was no periodic ptn.  
When periodic ptn. forms by mixing  $\text{CuSO}_4$  and  $\text{K}_2\text{CrO}_4$ ,  
 $\text{K}_2\text{CrO}_4$  is the precipitating electrolyte, contrary to  
Chatterji and Dhar (C. A. 31, 2087) J. J. B.

C. 4

Heats of wetting of Glassbeads kaolin and Chancay Var  
clay - A. V. Dumanovskii and P. D. Ovcharenko (Acad. N  
Sci Ukr. SSSR, Kiev). *Kolloid Ztschr.* 17, No. 17(102)  
Kashin I and clay II, when they have lower heats of  
wetting, adsorb when added with K<sup>+</sup>. For K-I and K-II,  
after drying at 100° C was 1 and 0 cal./esp.<sup>-1</sup> The thickness  
of the adsorbed H<sub>2</sub>O layer is 3.5 Å. The amt. (A) of H<sub>2</sub>O  
absorbed by K-I and K-II was 1.3% and 7.8% esp.<sup>-1</sup>  
From the net absorption of sugar, A was 2 and 7%, resp.  
The specific surface of K-I and K-II, calcd. from Q<sub>c</sub>, was  
35 and 210 sq. mm., while sedimentation analysis gave 0.2  
and 0.8 sq. mm., showing that the inner surface of particles  
also is accessible to H<sub>2</sub>O. I and II contg. more H<sub>2</sub>O than A (A  
e.g. 1% and 1.1% esp<sup>-1</sup>) also have considerable Q<sub>c</sub>; this is  
attributed to capillary condensation. — J. J. Bissman

OVCHARENKO, F., akademik

In the laboratories of Ukrainian chemists. Nauka i znyttia  
12 no.12:14-15 D '62. (MIRA 1:8)

1. AN UkrSSR.

JVUCHENKO, F., ukazemka

Frontline of Sverdlovskaya oblast' (Russia)  
1. AN UkrSSh.

OVCHARENKO, F.D., akademik; TRETINNIK, V.Yu.; KRUGLITSKIY, N.N.

Kinetics of the processes involved in the formation of  
structure by coagulation in aqueous clay dispersions.  
Dokl. AN SSSR 153 no.6:1385-1386 D '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
2. AN UkrSSR (for Ovcharenko).

OVCHARENKO, F.D., akademik

M.V. Lomonosov, the genius of the Russian nation. Dop. AN UkrSSR  
no.12:I-IV '61. (MIRA 16:11)

1. AN UkrSSR.

OVCHARENKO, F.D., akademik; TRETINNIK, V.Yu.; KRUGLITSKIY, N.N.

Structural and mechanical criteria in estimating the coagulating action of electrolytes on the aqueous dispersions of montmorillonite. Dokl. AN SSSR 153 no.4:869-870 D '63.  
(MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
2. AN UkrSSR (for Ovcharenko).

VASHCHENKO, Zakhar Markovich OVCHARENKO, F.D., akademik, otv. red.;  
NIKITENKO, Ye.D., red.

[Chemical mineral raw materials of the Ukrainian S.S.R.  
(1817-1963); a bibliographic index to the literature] Khi-  
michna mineral'na syrovyna Ukrains'koi RSR (1817-1963 rr.);  
bibliografichnyi pokazhchyk literatury. Kyiv, Naukova dumka,  
1965. 158 p. (MIRA 18:9)

1. Akademiya nauk Ukr.SSR (for Ovcharenko).

TRENTON, N.J. - Prentiss, 1974; available, Feb., 1974; 16 mm. (Color, 30 sec.)

1. Set of eight slides illustrating the use of heavy duty chains and heavy duty suspensions. (e.g. 100 ft. long, 16 tons.)

2. Instructional slide showing how to use the "Kwik R" lifting device.

OVCHARENKO, F.D.

USSR

Heat of wetting of kaolized clays. V. O. Ovcharenko  
Dobrolyubov, Nekr. 2/16, No. 3, 1957, 100-103 (Chemical  
summary, 140-1).--The heat of wetting of some clays of  
Ukraine does not change upon ignition between 100° and  
700°. The kaolite and claye contg. primarily claylike con-  
stituents do not change their hydrophilic properties even  
after complete removal of water of constitution. In poor  
clays no regularity was observed in the change of heat of  
wetting. At 800°-850°, the endothermic reaction which  
destroys the crystal lattice after the removal of water of  
constitution causes a more close and reciprocal penetration  
instead of a mech. joint. of amorphous  $\text{Al}_2\text{O}_3$  and  $\text{SiO}_2$ .  
The specific surface remains the same, and therefore the  
heat of wetting does not change. After removal of the  
water of constitution the wetting process slows down, as  
indicated by the decrease in interlayer distances. Clays  
ignited above 800° decrease the heat of wetting. This  
indicates the formation of a new chem. structure with a  
different specific surface. M. Charmandarjan

OVCHARENKO, P.D.; BYKOV, S.F.; DUMANS'KYI, A.V., diysnyy chlen.

Characteristics of the water bond in clays and the kinetics of dehydration.  
Dop. Akad. URSS no. 3:142-146 '51. (MLR 6:9)

1. Akademiya nauk Ukrayins'koyi RSR (for Dumans'kyi). 2. Instytut zahal'noyi  
ta neorhanichnoyi khimiyi Akademiyi nauk Ukrayins'koyi RSR (for Ovcharenko  
and Bykov). (Clay)

*VCHARENKO, F.D.*

(1) an Alsager (II), and a Durov (III). The investigated clay is after activation with water. The influence upon the properties decreased in the series:  $\text{Cu}^{++} > \text{H}^+ > \text{Na}^+ > \text{K}^+$ . Examples: dried I can bind 19.84 g.  $\text{H}_2\text{O}/100$  g., and the heat of wetting for natural I is 10.6, dried I 20.4, Cu—I 19.4, H—I 18.2, Na—I 12.2, and K—I 7.74 cal./g. I. Cu—I adsorbs 0.22, H—I 0.175, and K—I 0.144 ml.  $\text{C}_6\text{H}_6/\text{g}.$ ; the values for MeOH and  $\text{H}_2\text{O}$  show a similar trend. From said vapor I will adsorb 10.8, II will adsorb 9.9, and III will adsorb 12.9%  $\text{C}_6\text{H}_6$ . Isotherms are presented for the activated and unactivated clay for adsorption of MeOH,  $\text{H}_2\text{O}$ , and heptane. It is concluded that I would be the best clay for the industrial drying of gases and for the adsorption of valuable vapors from gases, if these are present in low concns. only. Werner Jacobson

Ovcharenko, F. D.

The electrokinetic potential of clays. F. D. Ovcharenko.  
*Dokladi Akad. Nauk Ukr. R.S.R.* 1939, 323-07 (1939).  
summary); cf. *C.A.* 43, 1316, 8620. --The electrokinetic  
potential,  $\zeta$ , and the heat of wetting,  $Q$ , of 8 clays (Chasov-  
yan, Glinkovets, and Kamenets-Podolsk) were detd., the  
first by electrodeosmosis (cf. Gorikov, *C.A.* 30, 7918).  
Complete exchange of the cations of the native clays with  
Ca, H, Na, and K increased  $\zeta$  and decreased  $Q$ , in the order  
given, indicating a specific relation between the hydrophilic  
and electrokinetic properties of the clays. Contrary to the  
findings of Arkhipov (*C.A.* 39, 2687) the temp. of firing,  
above 300°, did not affect  $\zeta$  or  $Q$ .  
I. Benowitz

OVCHARENKO, F.D.

Effect of adsorbed cations on the heat of wetting of clays. Ukr.  
khim. zhur. 19 no. 2(19-14) 1973. (MLRA 7:2)

1. Institut obshchey i neorganicheskoy khimii Akademii nauk USSR.  
(Cations) (Heat of wetting) (Clay)

OVCARENKO, F.D.

USSR/Agriculture - Ground water

Card 1/1 Pub. 138 - 6/12

Authors : Domanskiy, A.V., and Ovcharenko, F.D.

Title : Method of combating water filtration in forest soil

Periodical : Vienik AN URSR 3, 52-55, Mar 1954

Abstract : The problems of preventing the filtration of water into forest soil are debated. It was found, that humus colloids when saturated with divalent cations form a water proof layer over soils, containing calcium humates. It is emphasized, that the combined efforts by physico-chemists, soil scientists and hydrologists will make it possible to solve the problem of saving forest ground water for agricultural uses.

Institution: .....

Submitted: .....

UVCHARENKO, F.D.

The hydrophility of bentonites as influenced by their physicochemical nature.

S. D. Uvcharenko and S. P. Bykov (Inst. Gen. and Inorg. Chem., Acad. Sci. Ukr. SSR, Kiev). Kolloid. Zhur. 16, 134-40 (1954); cf. Ukrain. Khim. Zhur. 19, 134 (1953).

One specimen of kaolin (I) and 4 bentonites were studied. The bentonites were "askangel" (II), (contg. 75-80% montmorillonite, 10% kaolinite, 10% biotite and hydrobiotite, etc.), "gumbrin" (contg. 99% montmorillonite), Kamenets-Podolski clay (III) (contg. 99% montmorillonite), and Ushgorod clay (contg. 95% beidellite; 4.5% quartz, etc.). The ion-exchange capacity of these samples was 9, 20, 102, 100, and 40 mg.-equiv./100 g., resp. The heat Q of wetting was 1, 11, 21, 20, and 11 cal./g., whence the sp. surface area was 38, 424, 787, 735, and 422 sq.cm./g. The amt. of H<sub>2</sub>O adsorbed at 20° from vapor at 55% relative humidity was 1.1, 10, 19.0, 19.2, and 9.2%, i.e. approx. proportional to Q. When the cations of the natural clays were displaced by other cations, the Q decreased from Ca to H, Na, and K-satd. clay. The pore volume (from d.) increased from II > III > I, but the max. adsorption of C<sub>6</sub>H<sub>6</sub> was on III greater than on I because bentonites swollen in solvent vapors (also H<sub>2</sub>O and MeOH). The vapor adsorption of III was great when III was satd. with Ca<sup>++</sup>, and least for K-satd. III. The hydrophility of bentonites was greater, the greater was their ratio SiO<sub>2</sub>:Al<sub>2</sub>O<sub>3</sub> and the greater their montmorillonite content. III was as good as synthetic adsorbent.

J. J. Bikerman

Ovcharenko, V.D.

USSR.

✓ The biography of Ovcharenko as indicated in the following  
document: V. D. Ovcharenko and L. P. Tsvetkov.  
Coll. J. U.S.S.R. 10, 1954, p. 100.  
See C.A. 48, 2022.

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

... , F. .

... , F. . . . .  
... . . . .  
... . . . .  
... , July 1

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

GONCHAROV, Andrey Ivanovich, kandidat khimicheskikh nauk; OVCHARENKO,  
Y.D., kandidat khimicheskikh nauk, redaktor; ZIL'BA~~S~~, M.S.,  
redaktor; SIVACHENKO, Ye.K., tekhnicheskiy redaktor

[Bentonite as a valuable mineral raw material] Bentonity - tsen-  
noe mineral'noe syr'e. Kiev, Izd-vo Akademii nauk Ukrainskoj SSR,  
1955. 27 p.  
(Bentonite)

DUMANSKIY, A.V., redakter; MASHKARA, I.I., redakter; OVCHARENKO, F.D.,  
kandidat khimicheskikh nauk, redakter; ROTTER, V.A., doktor  
khimicheskikh nauk, professor, redakter; SKOLNIKSKIY, I.D.,  
doktor geologo-mineralogicheskikh nauk, redakter; MIKHALYUK,  
R.V., redakter; KAZANTSEV, B.A., redakter; SIVACHESKO, S.K.,  
technicheskiy redakter.

[Bentonite clays of the Ukraine; a collection of papers] Ben-  
tonitovye gliny Ukrayny; sbornik. Kiev, Vol.1, 1955. 125 p.  
(MLRA 9:5)

1. Deystvitel'nyy chlen AN USSR (yer Dumanskiy). 2. Akademiya  
nauk Ukrayny. Rada vyzchennia produktivnykh syl.  
(Ukraine--Bentonite)

BUMANSKIY, Anton Vladimirovich; OVCHARENKO, P.D., kandidat khimicheskikh nauk,  
otvetstvennyy redaktor; LEVBERG, Z.A., redaktor izdatel'stva; RAIHLINA,  
E.P., tekhnicheskiy redaktor.

[Bibliographical essay on the development of Soviet colloid  
chemistry] Bibliograficheskiy ocherk razvitiia otechestvennoi  
kolloidnoi khimii. Kiyev. Izd-vo Akademii nauk USSR. No.2  
(1936-1941 gg.) 1954. 238 p.  
(MLRA 9:6)

Ovcharenko, F. D.

✓ Ovcharenko, F. D.; Rozvitok koloidnoj khimii na  
Ukraini (The Development of Colloid Chemistry in the  
Ukraine). Kiev: Akad. Nauk Ukrainsk. SSR, 1956. R. S. R. Chem  
31 pp., k. 56.

PM CK

Oucharenko, F. D.

The swelling of clay. F. D. Oucharenko. Dokl. Akad. Nauk Ukr. SSR, 1960, No. 4 (Russian summary, 205-6).—Seven samples of clay were investigated to establish a quant. relation between the swelling in H<sub>2</sub>O and the mineral compn. of montmorillonite (I), smectite (II), and kaolinite (III). The method was that of Vasil'ev (Basic Methods of Measurement and the Technique of Determination of Physical Properties of Soils, 1953), which permits an accuracy to within ± 0.1%. The water absorption was thus determined, and it was found that the swelling of III and II, which have a rather rigid crystal lattice, is due to capillary forces; I has an elastic lattice, and for it an intercryst swelling is found. There is a relation between the swelling and the hydrophobicity. The swelling of clay in media of various polarities (H<sub>2</sub>O, MeOH, benzene) showed that there exists a relation between the max. swelling and the dielec. const. of such media; it was also noted that there is a relation between the heat of wetting of the various clays in the various solvents and the swelling. Thus the mol. nature of the surface of clay particles决定了 the degree of hydrophilicity and the strength of the bond between and among the particles.

Werner, Inc.

OVCHARENKO, F.D.

How to solve the mineral resources problems in the Ukraine.  
Visnyk AN UkrSSR 27 no.2:72-78 P '56. (MLRA 9:6)  
(Ukraine--Mines and mineral resources)

OVCHARENKO, F.D.

Achievements of Czechoslovakian scientists in the study of silicate raw materials. Visnyk AN URSR 29 no.11:56-62 N 1958. (MIRA 11:1)

1. Chlen-korrespondent AN USSR.  
(Zvolen, Czechoslovakia--Silicates--Congress)

OVCHARENKO, F.D., akademik; TRETINNIK, V.Yu. [Tretynnyk, V.IU.]

Effect of electrolytes on the structural-mechanical filtration properties of aqueous clay suspensions. Dop. AN UkrSSR no. 4:1210-1212 '62.  
(MIRA 18:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR, Z. AN UkrSSR (for Ovcharenko).

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

CHITYKO, Ye.A.; BLOKH, G.A.; OVCHARENKO, F.V.; VASIL'EV, M.I.; TROSHIN, V.P.

Activation of ka'ir with the neutron-active materials "Sverd-  
G5-2." Kozhukhov, prov. Chelyabinsk, Russia.

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

RE: ALTOFOLIO, JOSÉ ANTONIO ALBERTO  
CIA

MEETING WITH THE CHIEF OF STAFF OF THE NATIONAL GUARD

OF THE REPUBLIC OF NICARAGUA, DR. JOSÉ ANTONIO ALBERTO

SECRETARIO DE DEFENSA, DR. JOSÉ ANTONIO ALBERTO

• INQUIRIES FROM THE SECRETARIO DE DEFENSA, DR. JOSÉ ANTONIO ALBERTO

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

SUDNIKOV, Petr Petrevich, akademik; OVCHARENKO, F.D., akademik,  
otv. red.; BEREZINCY, A.S., red.; BUTT, Yu.M., prof., red.;  
MCHEDELCOV-PETROSYAN, C.P., red.; AVUSTINIK, A.I., prof.;  
BARZAKOVSKIV, V.F., doktor khim. nauk, red.; KUKOLEV, G.V.,  
prof., red.; MATVEYEV, M.A., prof., red.; MCHEDELCOV-  
PETROSYAN, C.P., prof., red.; ROYAK, S.M., prof., red.;  
POKROVSKAYA, Z.S., red.

[Chemistry and technology of silicates] Khimiia i tekhnologiya silikatov. Kiev, Naukova dumka, 1964. 608 p.

(MIRA 17:12)

1. Akademiya nauk Ukr.SSR (for Ovcharenko). 2. chlen-korrespondent Ukr.SSA (for Berzhnoy). 3. chlen-korrespondent AN SSSR i deystvitel'nyy chlen Pol'skoy Akademii nauk . AN Ukr.SSR (for Budnikov).

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

OVCHARENKO, V.D.; and others, etc.

EDITION OF 1950

POLITICAL PARTIES

THE SOVIET UNION

... In the following pages

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

OVCHARENKO, F.D.; TRETINNIK, V.Yu.; KRUGLITSKIY, N.N.

Structure formation in mineralized dispersions of palygorskite clays.  
Ukr. khim. zhur. 30 no.6, 594-595 '64. (MFA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001238

OVCHARENKO, F.I.; TRFTUMIK, V.YU.

stabilizing effect of polymerized polyacrylic acid on aqueous suspensions. Kr. khim. zhurn. 37 no. 12 p. 25-27. 1965.  
... . Institut obshchey i neorganicheskoy khimii AN UkrSSR.